Mount Tabor Residence
Modern house celebrates regional northwest woods

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First Forest Marketing Center
Beijing project promotes Canadian wood products in the Chinese marketplace
Pergolas and Pavilion at the Center City Park

Seven outdoor shade pergolas and a cantilevered-roof pavilion – intricately detailed with tropical purple heartwood – reference Greensboro’s rich industrial heritage.

Ted Touloukian, Architect

Located in an urban block, Center City Park in downtown Greensboro, North Carolina, is at the core of the Greensboro Center City Master Plan and the city’s recent growth and revitalization.

Three non-profit foundations came together to purchase an occupied city block and appoint Action Greensboro, a non-profit organization, to lead the commissioning of the $5.5-million park construction through a private/public partnership that included over 400 donations from $5 to $2 million.

In addition to seven outdoor shade pergolas and a pavilion, the park also includes a fountain, multiple sculptural elements, and two-dimensional interpretive graphics on the paving and plaza areas. Designers and architects worked collaboratively to ensure a seamless integration between the structures and landscape.

The pavilion contains public bathrooms, storage, support facilities for vendors and special events, and a full basement housing plumbing and mechanical equipment for the park operations. An 18- to 23-ft. cantilevered roof provides sheltered space for community gatherings, outdoor performances and events, and a donor wall commemorating the gifts that funded the project.

The pergolas provide a balance of shade and seating within the park and are oriented to create both a gateway entrance from the street edges and a sheltered seating niche adjacent to the park’s oval lawn and outdoor performance pavilion.

In an effort to work with simple methods of construction, standard lumber and decking sizes in unique combinations of standard details were assembled to create an image bound to its place. The structures are intricately detailed with tropical purple heartwood, painted steel, masonry, color impregnated concrete and copper sheet metal. These structures are designed respectively as a solid and a porous covering to provide not only relief from the intense North Carolina heat, but also as identifiable park features that reference the strong heritage of the shuttle and weaving looms of the local denim and textile mills of Greensboro’s rich industrial history. The wood details, textures, and alternating patterns contribute to the park theme that tells the story of Greensboro – its culture, history and people.
The selection of the wood type also contributed to the project's design identity. Purple heartwood is, as to its name, very purple in appearance when it is initially milled and is a hardwood that is very heavy and stiff, and provides good decay resistance and stability. The wood weathers very well and changes in color from bright purple to purplish brown and then to a medium brown. When left untreated, it is relatively maintenance free, holds a warm and vibrant appearance over time, and can be an economical alternative to the more commonly seen tropical hardwoods such as ipe and teak often used in similar applications. The sustainable qualities that contribute to its gradual change in color and texture are an appealing aspect to the design because it further connects the textile spirit of the faded worn denims and the changing colors of the park's trees and plants.

The pergolas are constructed of two different types of shop fabricated box rafters assembled from 2 x 12 wood ripped to profiles that create a flattering edge. Ledges are created from 3 x 4 wood decking fastened with 2¼-in. stainless-steel wood screws and spaced in gradual increments at alternating angles to provide a dynamic sun shading affect. The columns are encased with 3 x 6 wood plasters through bolted to the steel "T" frame with counter sunk stainless steel through bolts and concealed by purple heart face grain plugs.

The pavilion's identifiable image is a cantilevered roof with a "folded" purple heartwood wall and soffit that is detailed with 1 x 4, 1 x 6 and 1 x 8 tongue and groove wood panels with ½-in. reveals blind fastened with stainless-steel wood screws. These members assembled in a continuous alternating pattern contained by 2x vertical ribs that align with the beam soffits above. The cantilever is constructed with continuous steel beams that are wrapped with pressure treated blocking and finished with 2 x 12 ripped purple heartwood spalting out in a gentle fanning motion. The space between the beam enclosures taper to a minimal dimension at the edge of the roof to create an alternating ribbed pattern evocative of the textile weaves and akin to the more porous towned pergolas.

The iconic feature of the pavilion is the placement of silicon bronze donor plaques between the vertical purple heartwood wall ribbing. The client requested the inclusion of an extensive plaque system that recognizes the wide levels of philanthropy and the incremental values of the different donors to the project. The design solution sought to make this a highlighted sculptural composition knitted into the purple heartwood wall of the pavilion. The plaque system organizes seven levels of donors based on the hierarchy of the amount of gift provided. The largest donors have the largest plaques located at the center of the pavilion followed by incrementally smaller sized plaques for smaller donations as one moved towards the outside walls. The concept creates an abstract pattern integrated with the textile patterned precedent used with the purple heartwood.

Overall, the park and structures are an overwhelming success. They have become an image and gathering place for the residents of Greensboro with purpose and life to a rejuvenated downtown district.
Above: The pergolas reference the strong heritage of the shuttle and weaving looms of the local denim and textile mills of Greensboro's rich industrial history.

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